

BCGMG Quick Start Guide / User Manual

Version 1.1





ATTENTION! STATIC ELECTRICITY SENSITIVE DEVICE!

The BCGMG, just like any other electronic device, is susceptible to irreparable damage caused by occasional static electricity discharge in its inner board and components. It is essential to carry out the static electricity unloading from the body prior any installation/operation procedures. It is strongly recommended to avoid any unnecessary contact with the device components. WARNING: damages caused by static electrical discharges are NOT covered by the End User Warranty Certificate!

To discharge static electricity, consider the following procedures before any operation including the BCGMG:

- 1 - With your computer off, make sure it is grounded keeping its power cord plugged into a 3 prong grounded outlet.*
- 2 - Touch - for few seconds - a bare metal frame (not a painted or coated surface) of the computer case. Turn the computer on.*
- 3 - With the computer on, repeat the step 2. Keep your hand in contact with the computer case for few seconds.*
- 4 - Consider to use a static electricity discharging wristband to perform long operations using the BCGMG. Electricity discharging wristbands are available in electronics supplies stores. Please refer to manufactures instructions to static electricity discharging optimization.*
- 5 - The device now is ready for assembling and connections. Avoid unnecessary contact with the device components.*



ATTENTION!

AVOID INAPPROPRIATE DISPOSAL OF THIS DEVICE AND ITS COMPONENTS!

This device is made using electronic components which can be harmful to environment if not properly disposed. Please check your local rules and regulations for the proper disposal and recycling of this device and its components after the end of its life cycle.



ATTENTION!

DO NOT USE CAPACITORS FOR RECIRCULATION! USE ONLY DIODE!

This document is divided in two main sections: “BCGMG Quick Start Guide” and “BCGMG User Manual”. The first section content is based in simplified diagrams of the BMC Auxiliary Board of the BCGMG Device. Despite the information present in the first section, we strongly recommend the reading of the “User Manual” section for a detailed explanation of the connectors, configuration parameters and other settings.

BCGMG - Quick Start Guide

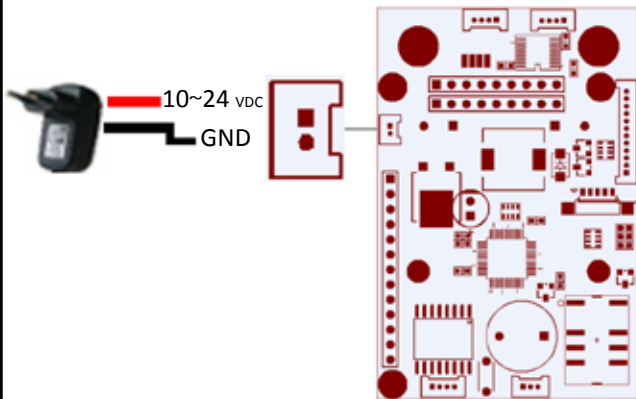


ATTENTION:

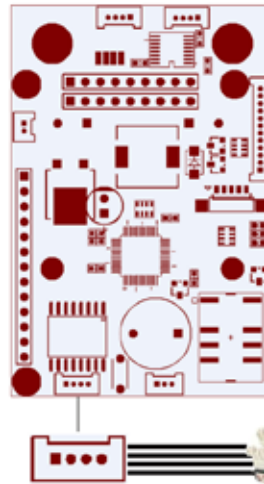
If the BCGMG device is not recognized it won't be listed in the NKHM (Neokoros Hardware Manager) control software main screen.

In this case, please follow the instructions of the topic "If the Device does not Appears in the List..." on page 11 in this document.

Power Supply 10~24 VDC

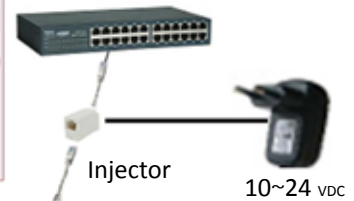


Power Supply Injector (Network cable)



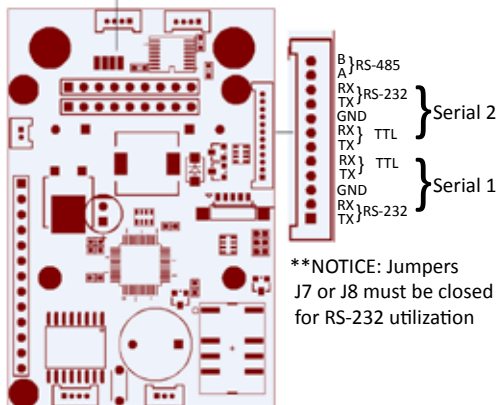
In this mode, the power supply is transmitted thru the network cable using the blue and brown pairs.

WARNING: Not PoE (IEEE802.af) compatible.



Communication (Serial Port)*

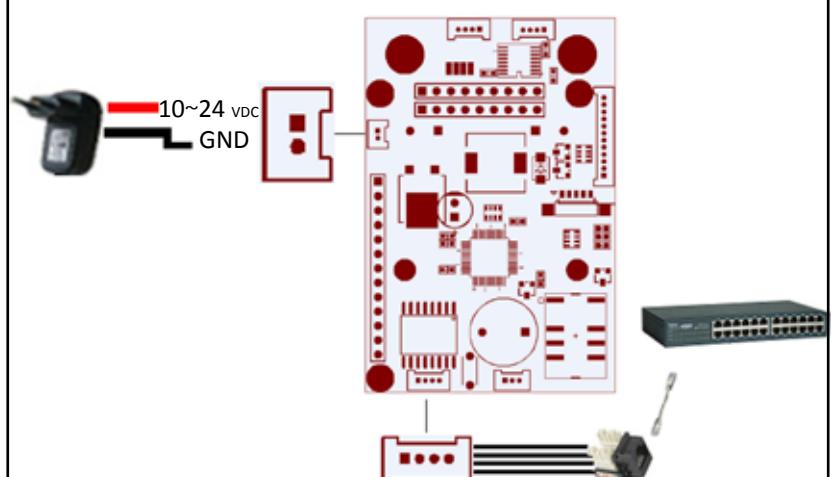
J8 J7** Jumpers



**NOTICE: Jumpers J7 or J8 must be closed for RS-232 utilization

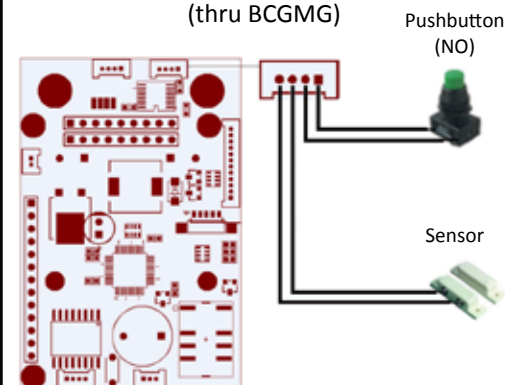
*External devices control only

Communication (Ethernet Network)



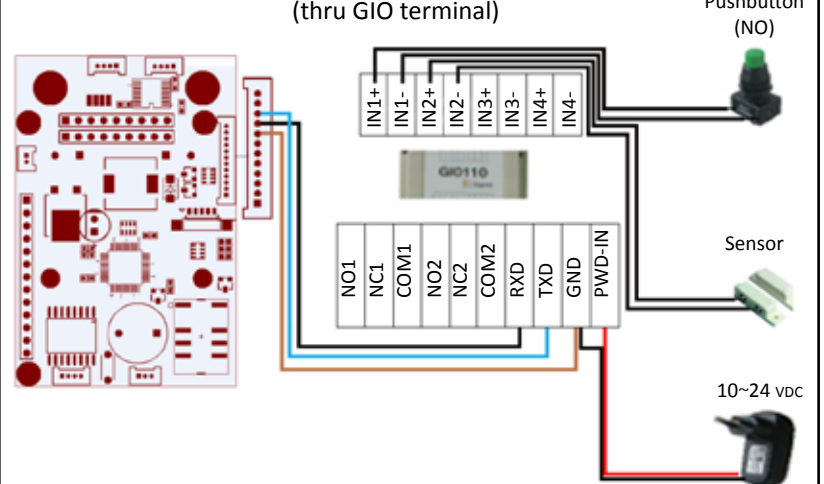
Sensors

(thru BCGMG)



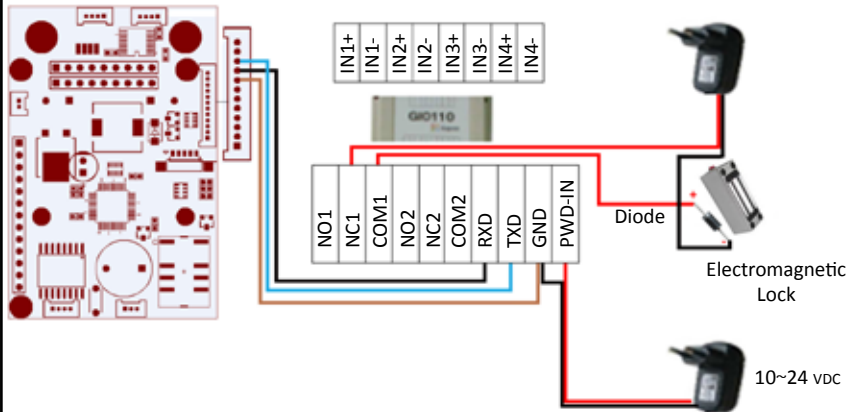
Sensors

(thru GIO terminal)



Control Outputs (thru GIO terminal)

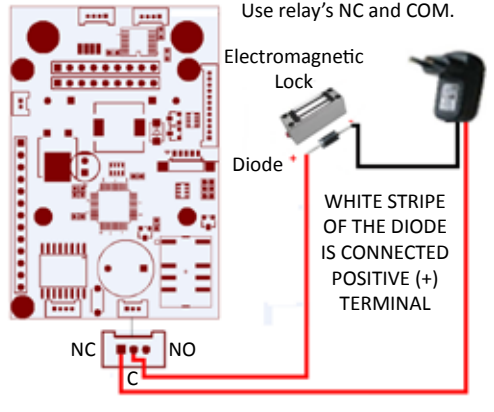
WARNING: DIODE INSTALLATION IS REQUIRED FOR LOCKS OF ANY TYPE. DIODE TYPE REF: 1N4007. WHITE STRIPE OF THE DIODE IS CONNECTED TO THE + TERMINAL



Control Outputs (thru BCGMG)

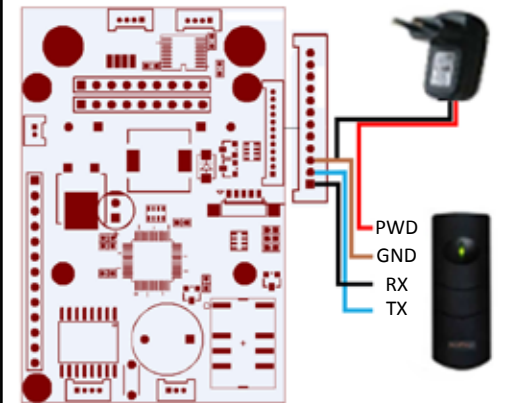
Strike Locks: Use relay's NO and COM.

Electromagnetic Locks: Use relay's NC and COM.



Card Reader

**Card reader power*



Card reader types
Codes for settings

- 1 - Mifare SRT Neokoros
- 2 - RFID 125 KHz
(any protocol like Acura's)
- 3 - Bar Code
- 8 - Mifare Duali DE-ABM6
- 9 - Acu Mifare AM-11

NOTE: Some card readers use only the RX pin of J5 connector. See Card S1 and S2 references in the "User Manual" Section

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***WARNING:**
POWER ADAPTOR VOLTAGE MUST BE APPROPRIATE TO THE CARD READER'S VOLTAGE.

Using Neokoros Hardware Manager (NKHM)

The NKHM main screen shows the BCGMG in the products list. The program also shows other information about the BCGMG device, including the IP Number. If the device does not appear, please go to page 11.

Neokoros Hardware Manager - 2.3.1.2

Refresh Tests... Settings... Firmware... Update Key More

Product	Serial ...	Version	IP	Server
0:0:0:216	NK-FP3	1.00.34j	192.168.2.16	192.168.0.10
0:0:0:255	NK-FP3	1.00.34k	192.168.2.55	192.168.0.10
0:0:0:454	NK-FP3	1.00.34j	192.168.2.198	192.168.0.10
0:0:0:1856	NK-FP3	1.00.34v	192.168.18.56	192.168.0.168
0:0:3:388	GAM110	1.00.37b3n	192.168.3.88	192.168.0.151
0:11:19:411	BCGMG	1.00.37c9-C2	192.168.3.23	192.168.0.131
1:11:20:142	GAM110	1.00.37c3	192.168.20.142	192.168.0.10
1:11:20:181	GAM110	1.00.37c3	192.168.20.181	192.168.0.10
1:11:20:265	GAM110	1.00.37d2	192.168.0.216	192.168.0.156

0:11:19:411 - mais informações

MAC (Ethernet): 00:17:48:21:31:9B

Hardware version: 1

Boot loader version: 1

CPU: AT91SAM9G20

Monitor: no Z:\nks\comum\upd\nkapp-GAM-20130619-1.00.37d2-Fat.bin 9 equipments

Press F5 or click on "Refresh" if the BCGMG is not listed.

Hardware and Device Configuration: For hardware tests and device configuration, select BCGMG in the list and press “Ctrl” + “T”. This will invoke the following screen:

Hardware tests - NKHM 2.3.1.2

Terminal: 0:11:19:411 IP: 192.168.3.23 ☒ Activate communication ☐ Big timeout Close

Information | Devices | Messages | Image | Notifications | Settings | Files | IP Settings

Basic information ☒ Show on activation

Serial number: 0:11:19:411 Read Type: BCGMG

Version: 1.00.37c9-C2 Read

Cryptographic key

Status: Unprotected Protect...

Stress

Ser.No.	IP	OK	Error
☐ 0:0:0:216	192.168.2.16		
☐ 0:0:0:255	192.168.2.55		
☐ 0:0:0:454	192.168.2.198		
☐ 0:0:3:388	192.168.3.88		
☒ 0:11:19:411	192.168.3.23		
☐ 1:11:20:142	192.168.20.142		
☐ 1:11:20:181	192.168.20.181		
☐ 1:11:20:265	192.168.0.216		

Start

Commands/sec: ---

Commands OK: ---

retransmitted: ---

Commands w/ Error: ---

Total commands: ---

Elapsed time: ---

IP Configuration: Click on “IP Settings” Tab. On the screen, the panel “New Settings” will show the following data:

Hardware tests - NKHM 2.3.1.2

Terminal: 0:11:19:411 IP: 192.168.3.23 ☒ Activate communication ☐ Big timeout Close

Information | Devices | Messages | Image | Notifications | Settings | Files | **IP Settings**

Send to

☒ Broadcast ☐ Current IP Serial number: 0:11:19:411

New settings

☒ Change terminal IP: 192.168.3.23 ← EQUIPMENT IP

☐ Network mask:

☒ Change server IP: 192.168.0.131 ☒ this machine

☐ Gateway: ☐ None

Server index: 0 Clear

Current settings

192.168.3.23

255.255.0.0

192.168.0.131

0.0.0.0

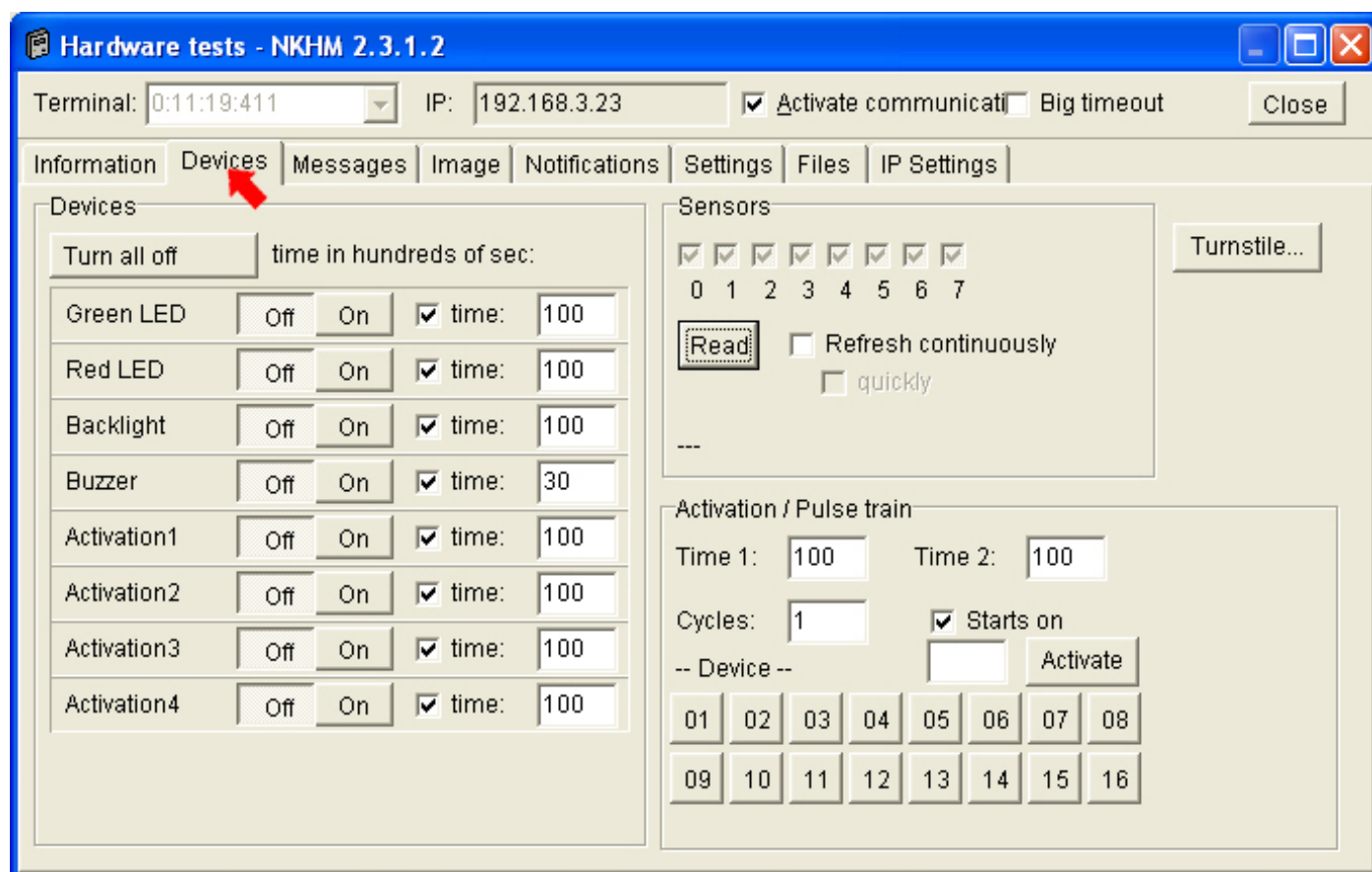
00:00:00:00:00:00

Configure ---

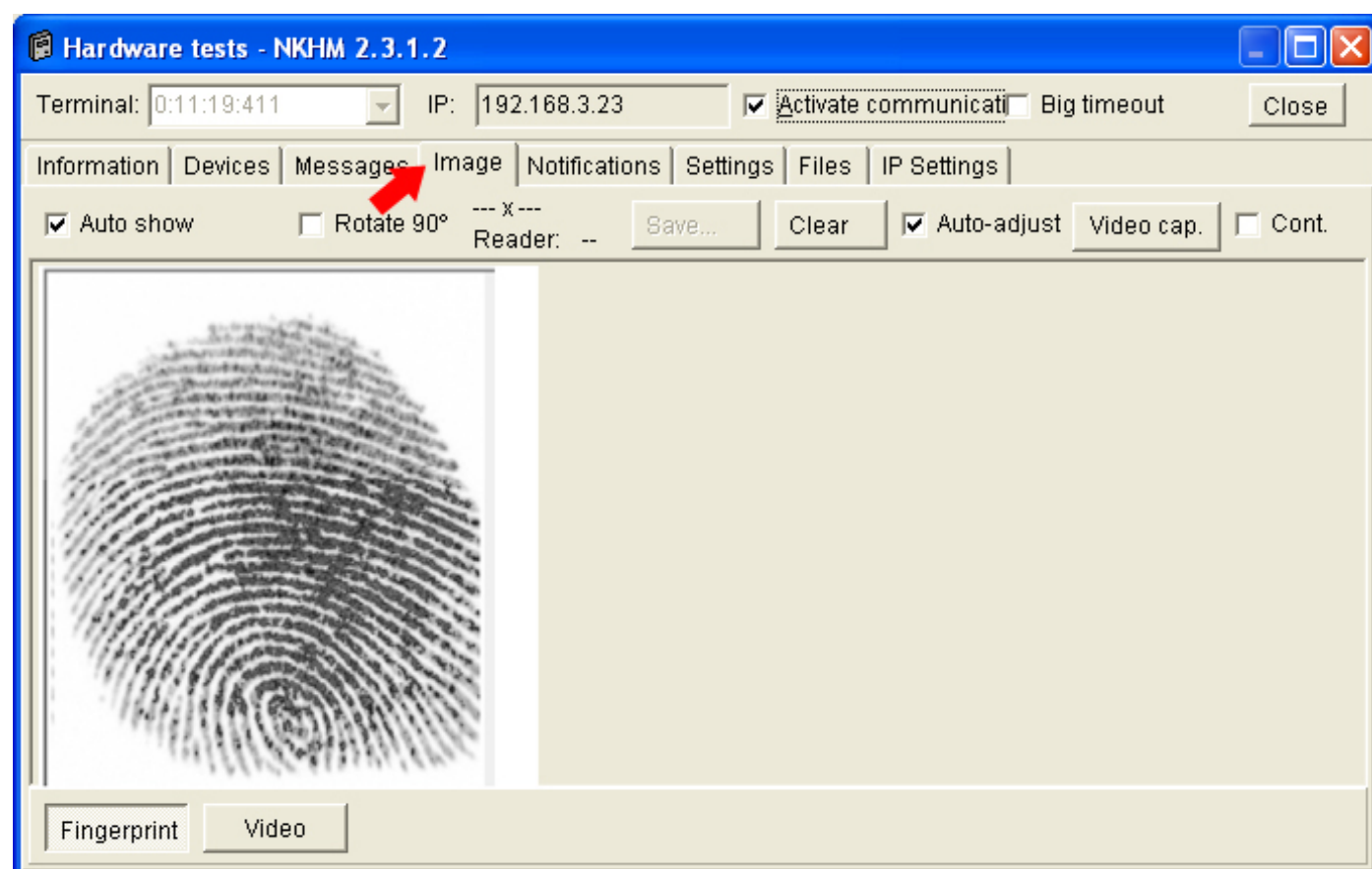
Click on “Configure”. Check for the following confirmation message:

Configure OK! Test worked

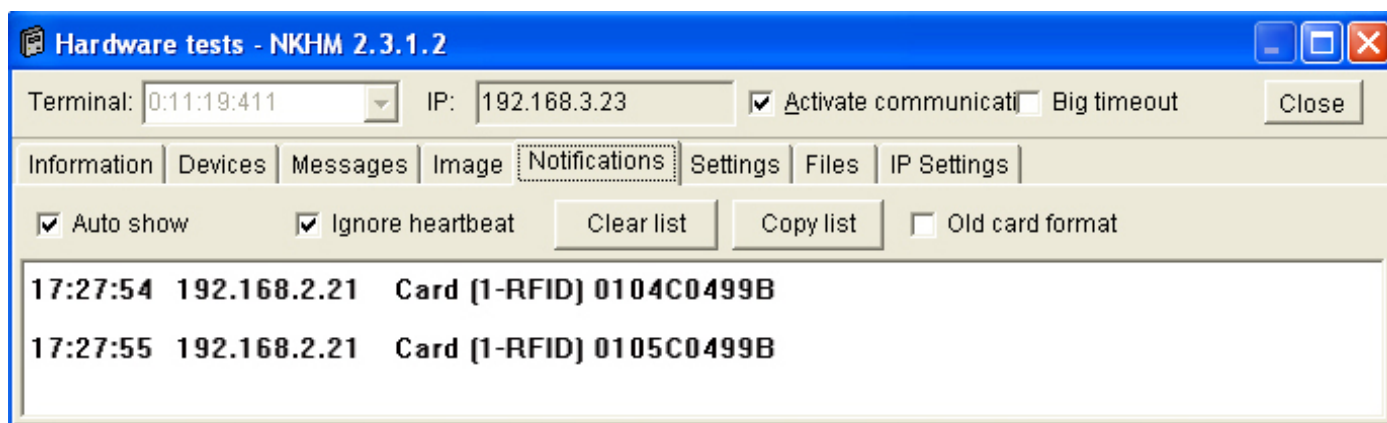
Devices & Sensors Test: Click “Devices” to run devices and sensors tests. The “Devices” tab will invoke the following screen:



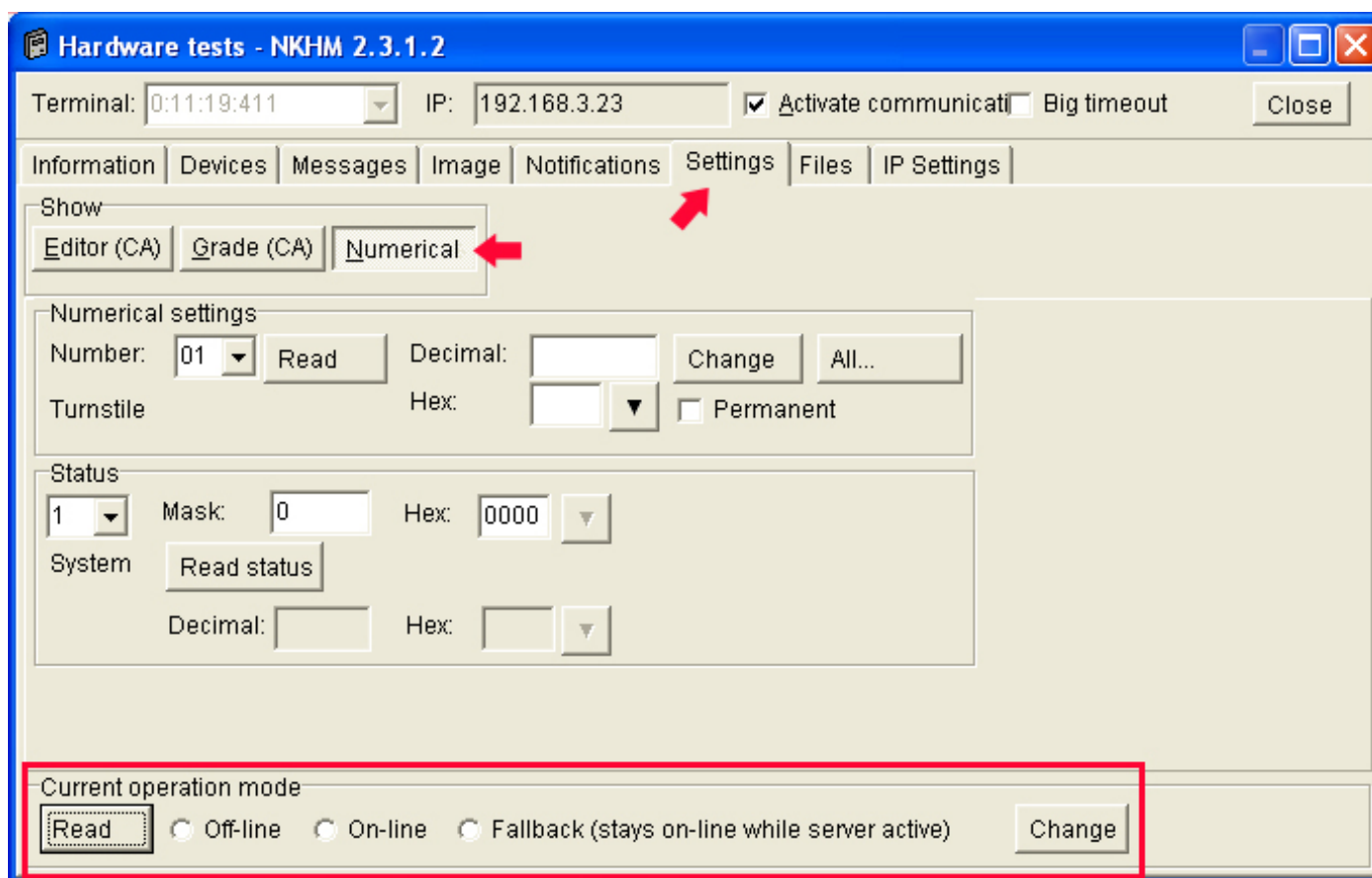
To perform a biometric reading test, click on “Image” tab. This section allows to check the fingerprint image or a video image if the device is connected to a camera:



Card Reader Test: click “Notifications” tab to a list of card readers. Select the “Auto show” function.



Selecting Status: In the “Settings” tab > “Numerical” button, it is possible to choose the device operation mode. Options are “Off-line” (for StandAlone operation), “On-line” and “Fallback (stays on-line while server is active)”. Function is not saved when the unit is turned off. Please refer to “8.1 - Mode” parameter in the User Manual section.



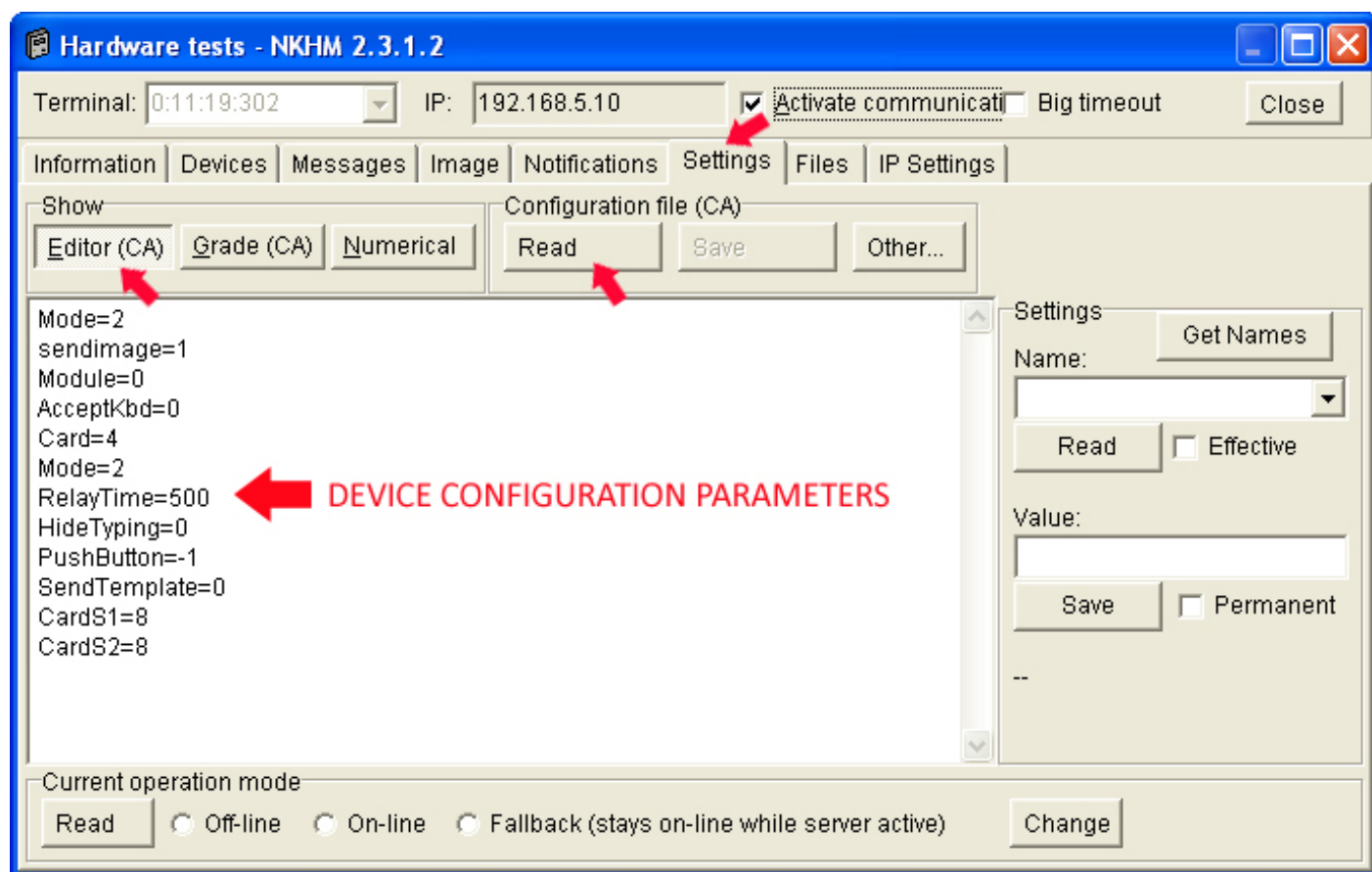
Editing Configuration Parameters Values: Configuration parameters values can be easily edited using Neokoros Hardware Manager. Please follow the steps below:

- 1 - With the BCGMG connected, run the NKHM application.
- 2 - Double click on the device name on the list.
- 3 - Click on the “Settings” tab.

4 - In "Show" click on "Editor (CA)" button.

5 - In "Configuration file (CA)", click on "Read" button.

The device parameters will be listed on the screen as the following picture shows:



6 - Edit parameters/values in the parameters list and then click the "Save" button of the "Configuration file (CA)" section.

For detailed information about the main parameters and its values, please refer to sections 4 to 8 in this manual.

Firmware Load/Update: NKHM application allows to load/update the firmware of the selected device in its main screen. To load a firmware file, proceed as described below:

To load a firmware file:

1 - In the NKHM main screen, select the device on the list.

2 - Click on the "Firmware" button.

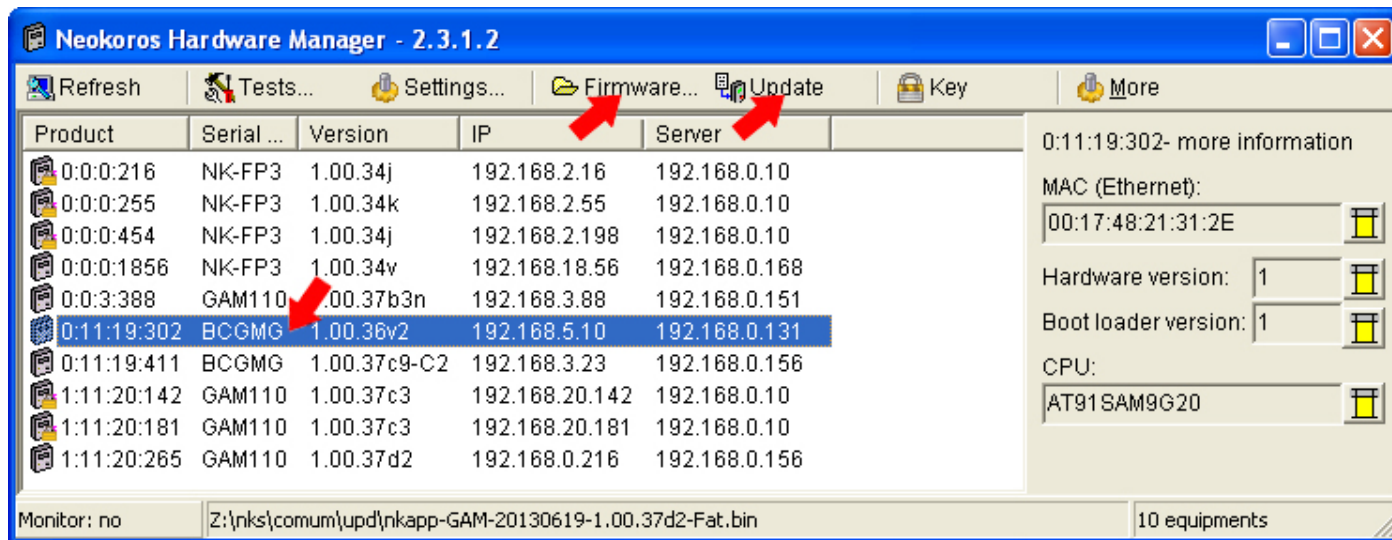
3 - Select a firmware file and click "Open" in the dialogue window.

To update a firmware file:

1 - In the NKHM main screen, select the device on the list.

2 - Click on the "Update" button.

3 - Confirm the update operation in the message box.

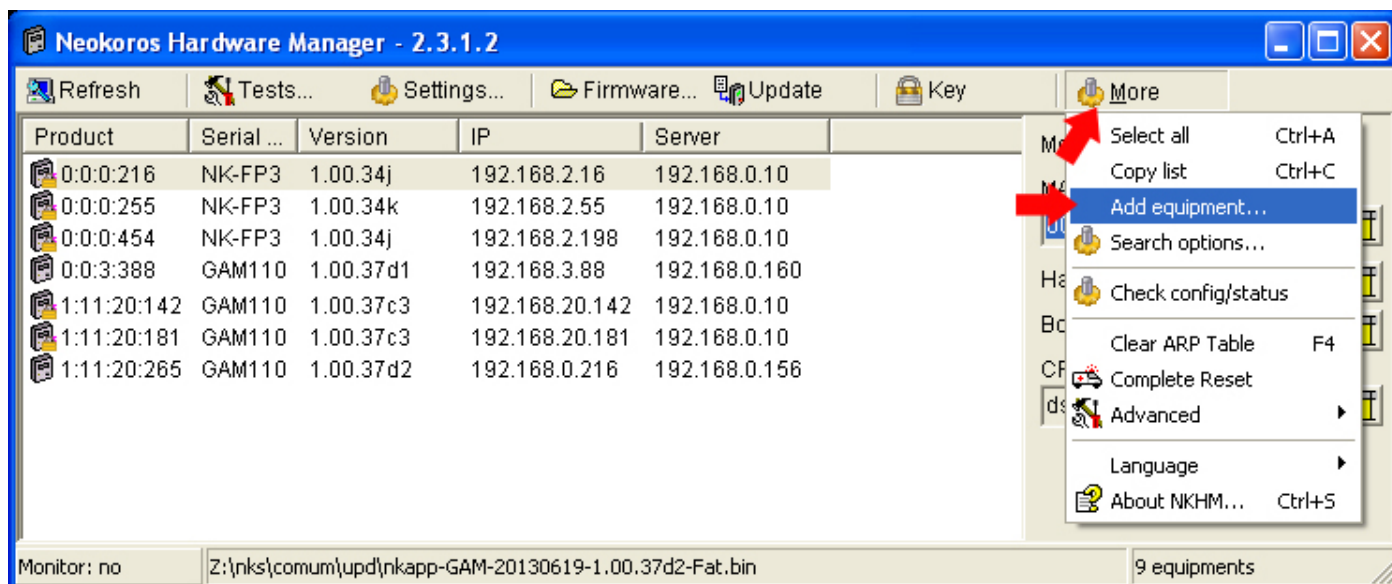


WARNING: It is strongly recommended the backup of the original files prior any other operation involving parameters changes and/or any firmware file substitution. Firmware files must be provided by NEOKOROS Authorized Customer Support Service.

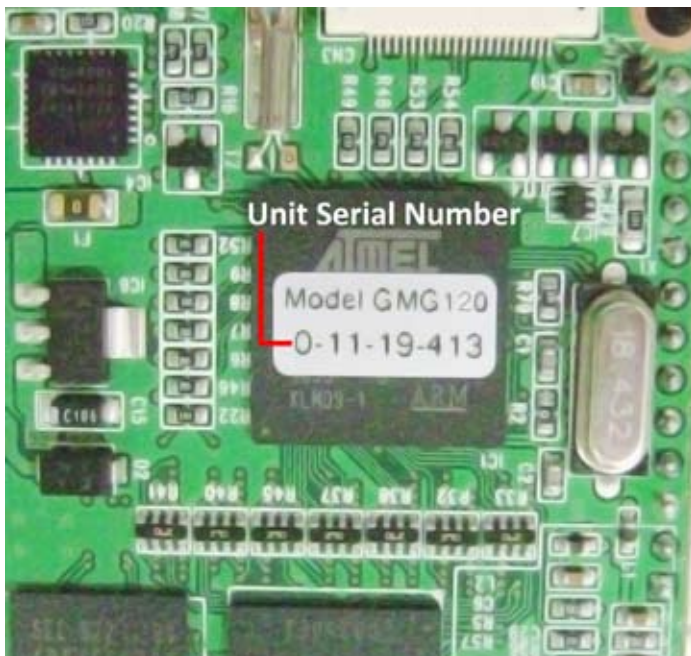
If the Device does not Appears in the List...

... and you are sure the network is ok, the main reason is due the differences between the network and device configuration. Please follow the steps below:

- 1 - Connect the device to the computer using a crossover network cable.
- 2 - Using the NKHM application, click on "More" > "Add equipment".



- 3 - Type a PC compatible IP value.
- 4 - Type the equipment serial number. This can be retrieved from the internal tag attached to the GMG-120 processor module.
- 5 - Enter the serial number using the format A:BB:CC:DDD. For example, for serial number 0-11-19-302 use the format 0:11:19:302.
- 6 - Click on "Ok"



Add equipment
✕

IP:

Port:
 ☒ Default

Serial number:

✓
OK

✕
Cancel

7 - The device will appear on the list of NKHM main screen as “Unknown”. Tests and settings can be now executed. Double click the “Unknown” device on the list.

Neokoros Hardware Manager - 2.3.1.2
_ □ ✕

Refresh Tests... Settings... Firmware... Update Key More

Product	Serial No.	Version	IP	Server
0:0:0:216	NK-FP3	1.00.34j	192.168.2.16	192.168.0.10
0:0:0:255	NK-FP3	1.00.34k	192.168.2.55	192.168.0.10
0:0:0:454	NK-FP3	1.00.34j	192.168.2.198	192.168.0.10
0:0:3:388	GAM110	1.00.37d1	192.168.3.88	192.168.0.160
? 0:11:19:302	Unknown	?	192.168.2.25	
1:11:20:142	GAM110	1.00.37c3	192.168.20.142	192.168.0.10
1:11:20:181	GAM110	1.00.37c3	192.168.20.181	192.168.0.10
1:11:20:265	GAM110	1.00.37d2	192.168.0.216	192.168.0.156

0:11:19:302- more information

MAC (Ethernet):

Hardware version:

Boot loader version:

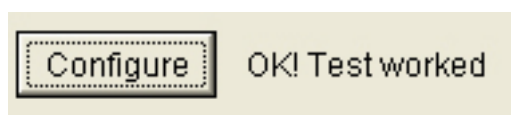
CPU:

Monitor: no
Z:\nks\comum\upd\nkapp-GAM-20130619-1.00.37d2-Fat.bin
9 equipments

8 - In the “Hardware tests” section, click on the “IP Settings” tab.

9 - Click on the “Configure” button.

10 - Check for the following confirmation message:



BCGMG - User Manual



BCGMG User Manual - Contents

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1 - Introduction/Main Features

The BCGMG is a versatile device for access control used in both residential and corporate environments. Its features include easy installation and utilization. Besides its small size, the device incorporates the latest reading and identification technology. According to the highest required quality standards, the BCGMG also features total support for communication ports.

Some other BCGMG features:

- BTicino high impact/resistance enclosure;
- Standard 4X2 box for wall fixation;
- Capacity up to 12,000 (twelve thousand) fingerprint digital registers in "StandAlone mode". Unlimited in "on line mode" (according to the parameter settings and the license type for people flow control);
- Serial RS-232 (02 ports), RS-485 (01 port) for automation and auxiliary devices control;
- Uses 5546 and 5548 UDP Ethernet ports for communication (commands and images, respectively);
- Electroluminescent biometric reader;
- 10 to 24 v. power supply; (use 12VDC 500mA for BCGMG. Increase amp. if used to control door locks);
- External trigger relay;
- Identification of digital features in about 1 second; (average of 0,8 seconds in "on line" mode).

The device enclosure case contains two main boards:

- GMG 120: Processing and control module;
- BMC: Auxiliary Board consisting of connectors coupled to GMG 120 Module. Allows network connection, RS-232 and RS-485 serial communication, control of relay based external device, provides LEDs for visual indication and a buzzer for audible general signaling.

Fig.1: The BMC Auxiliary Board. Fig 2: The GMG 120 Module, for device processing and overall control.

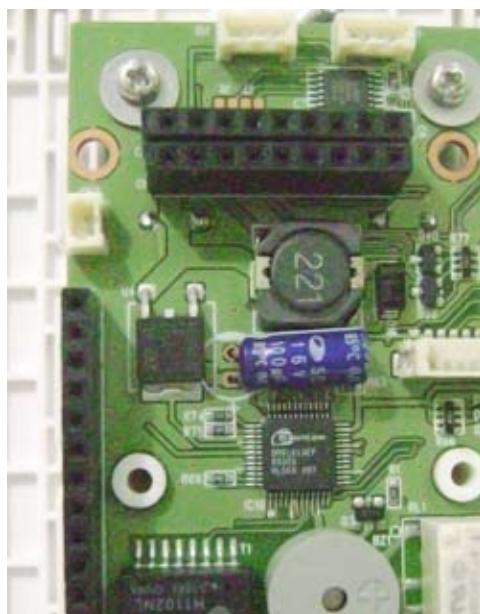


Fig.1: BMC Auxiliary Board. Several connectors to external communication.



Fig.2: GMG 120 Module: Device overall processing and control unit.

The general BCGMG components arrangement when assembled, are similar to the image shown in Fig. 3: GMG 120 Module coupled to the BMC Auxiliary Board.



Fig.3: BCGMG Device: Assembled by the GMG 120 Module (top) and the BMC Auxiliary Board.

2 - Assembling/Connectors

Please make sure to check if all required cables and screws for assembling are present; (Fig.4). The BMC Auxiliary Board shall be firmly secured in the BTcino enclosure. Board connectors must be identified according the image shown in Fig. 5:



Fig.4: Screws, connectores and cables used in the assembly of the device.

- CN7: 10 to 24V power supply input connector;
- J1: Ethernet connector;
- J3: Relay connector (NO, COM and NC);
- J4: Sensors connector;

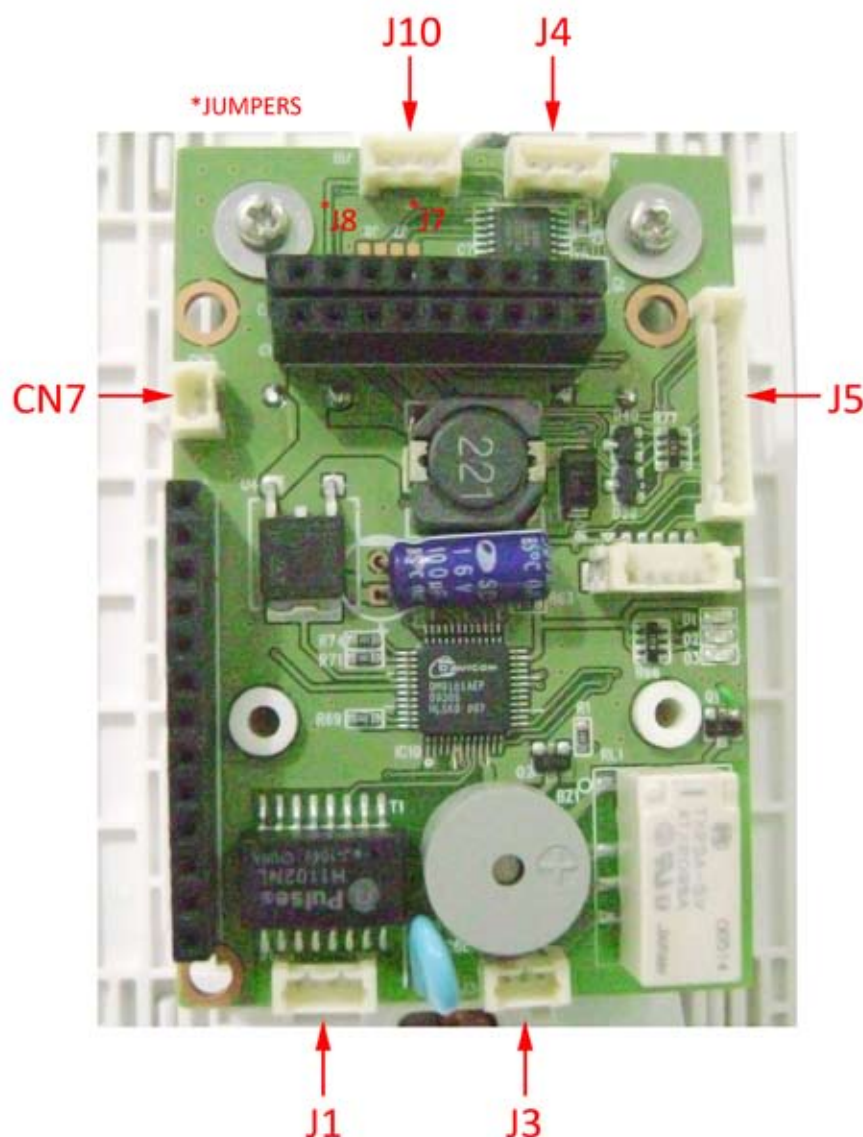


Fig.5: BMC Auxiliary Board connectors.

- J5: Serial communication connector;
- J10: LEDs connector.

Please make sure the flat cable is connected to the biometric reader before the BMC Auxiliary Card fixation in the BTCino enclosure. Fig.6 shows the biometric card reader side view. The biometric reader is connected to the flat cable and properly positioned into the BCGMG device enclosure.

After securing the Auxiliary Board with the screws, please make the appropriate connections to the devices

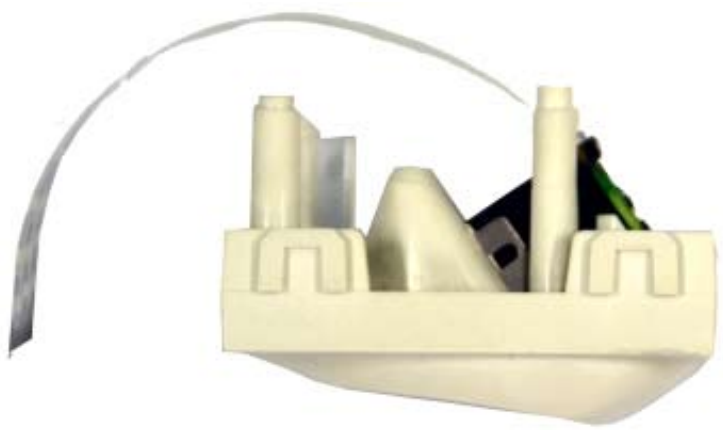


Fig.6: Flat cable connected to the biometric reader already properly positioned in the device enclosure.

which will be used with the BCGMG; (Fig. 7). For connectors functions and details, please refer to section 3.2.

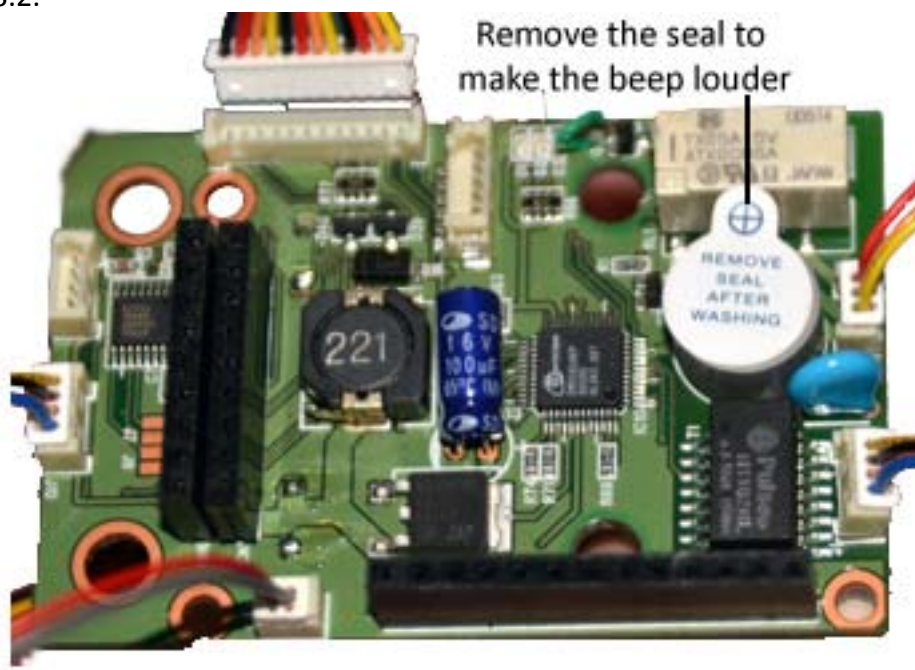


Fig.7: Cables connected to the BMC Auxiliary Board connectors.

After the connections, the GMG 120 Module should be attached to the BMC Auxiliary Board. In Fig. 8, the highlighted part must be aligned with the BMC Auxiliary Board.

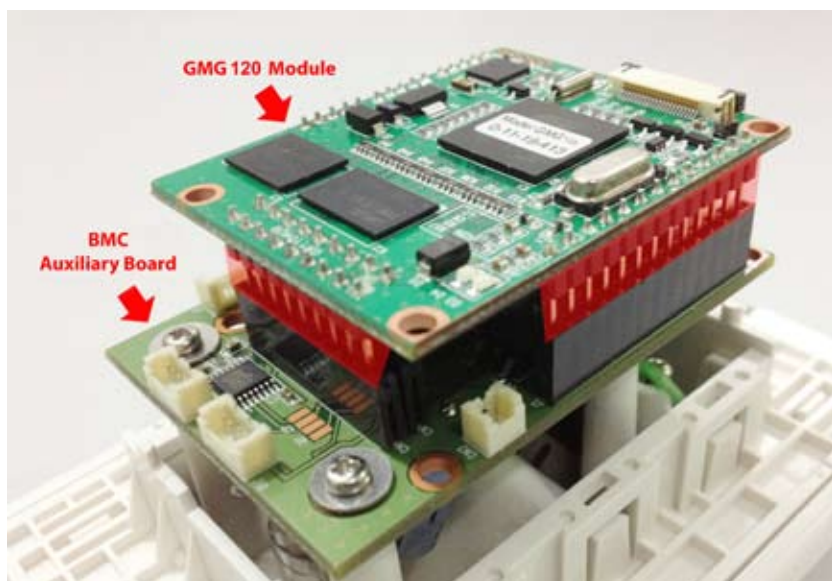


Fig.8: Align the GMG 120 Module terminals (highlighted in the figure) with the BMC Auxiliary Board connectors. Then...

After the alignment press the module carefully, coupling it with the BMC Auxiliary Board; (Fig. 9).

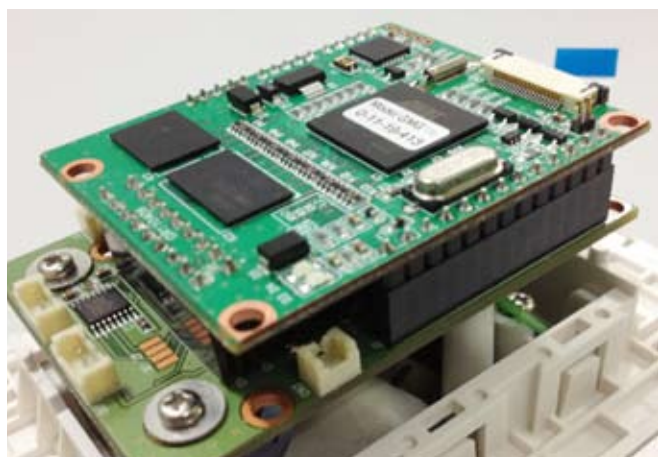


Fig.9: ...carefully press the module over the Auxiliary Board. The figure shows the Module coupled to the Auxiliary Board.

Connect the biometric reader flat cable to the correspondent terminal in the GMG 120 Module; (Fig. 10).



Fig.10: Connect the other end of the flat cable, from the biometric reader, to the corresponding terminal in the GMG 120 Module.

With the set properly connected to the biometric reader, the BCGMG is ready to be installed in the standard 4X2 box where it will operate. Please refer to section 3.2.7 for power supply connection. After securing the unit in the 4X2 standard box, just attach the outer frame; (Figure 11). The BTcino enclosure can be purchased in a large variety of colors and different materials; (standard BTcino 4X2 plate).

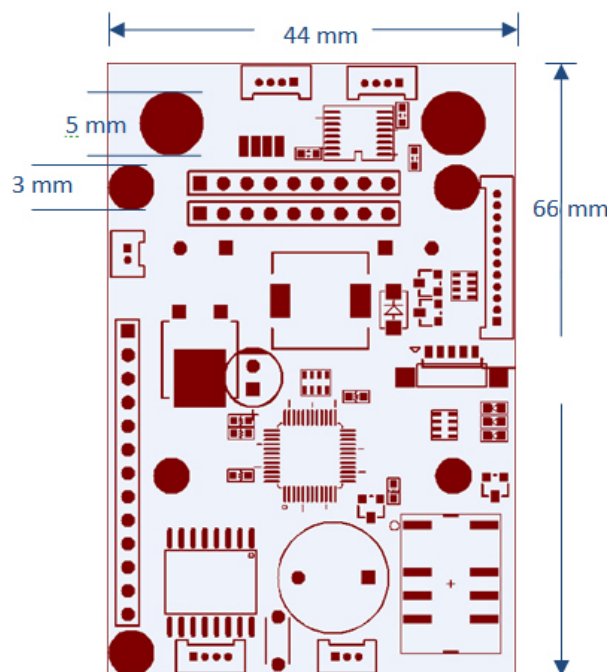


Fig.11: The BTcino enclosure is available in several different colors for perfect fitting in any kind of environment.

3 - Specifications (BMC Auxiliary Board)

Item	Specification
Network Communication Speed	10/100 Mbps
Serial Ports	02 RS-232 or TTL ports. 01 RS-485 port
Leds	03 Leds for visual indication
Buzzer	01 Buzzer for audible general signaling
Relay	01 SPDT Relay for external device control

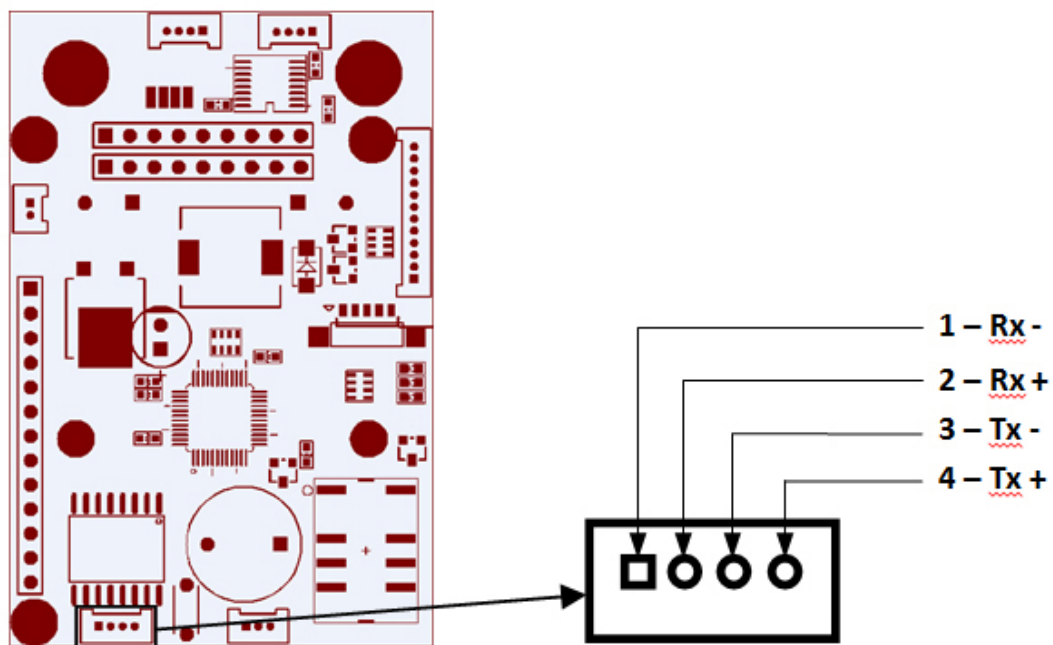
3.1 - Dimensions



3.2 - Connectors (pin out and functions)

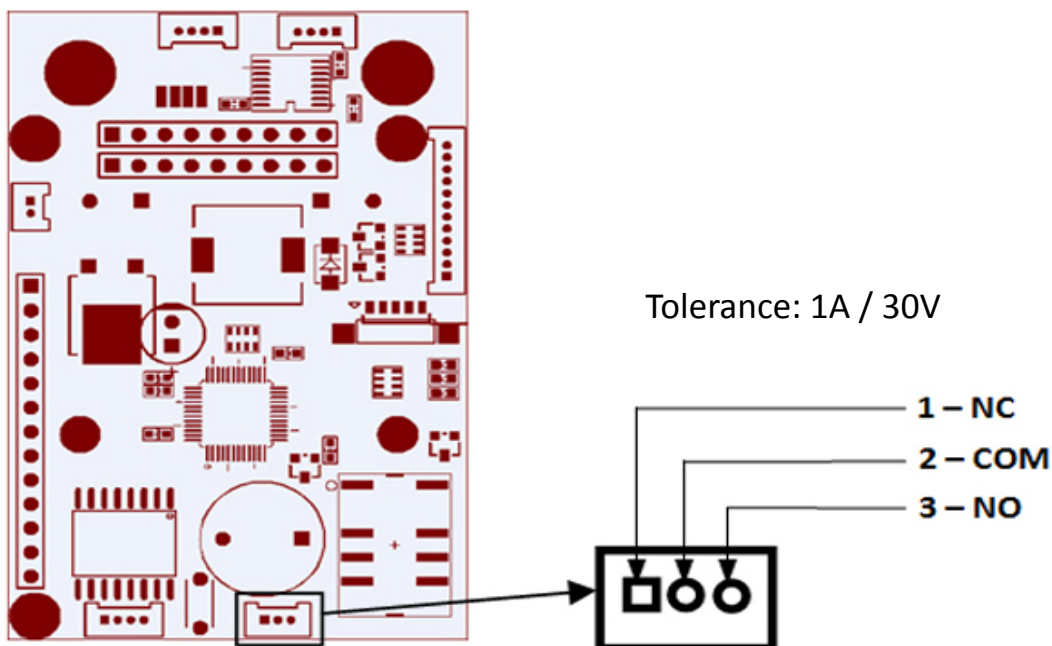
The following sections describe the BMC Auxiliary Board pin out and their respective functions.

3.2.1: J1 - Ethernet Connector



Pin	Function	Description
1	RX -	Data reception -
2	RX +	Data reception +
3	TX -	Data transmission -
4	TX +	Data transmission +

3.2.2: J3 - Relay Connector



Pin	Function	Description
1	NC	Normally-Closed
2	COM	Common
3	NO	Normally-Open

3.2.3: External Device Control

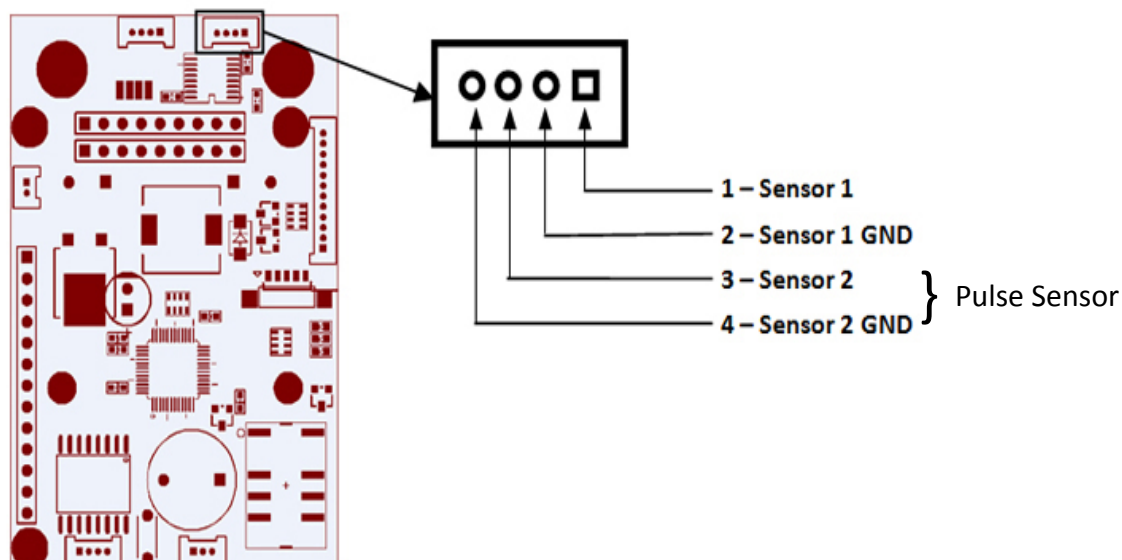
To control an external device, connect the wires from the J3 connector directly from the board internal relay.

Pin 01: Connection is always ON. When triggered, it will be OFF.

Pin 02: Common.

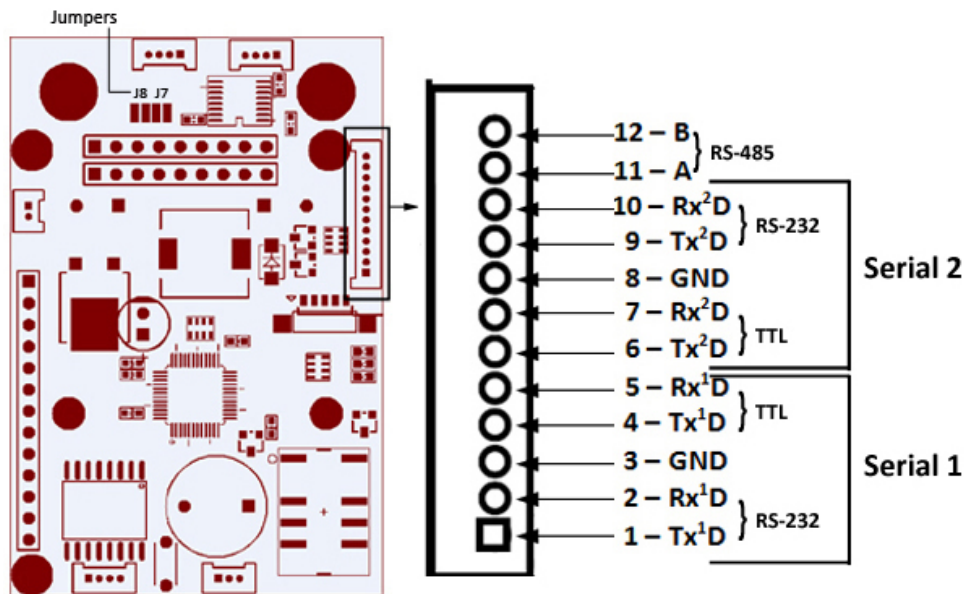
Pin 03: Connection is always OFF. When triggered, it will be ON.

3.2.4: J4 - Sensors Connector



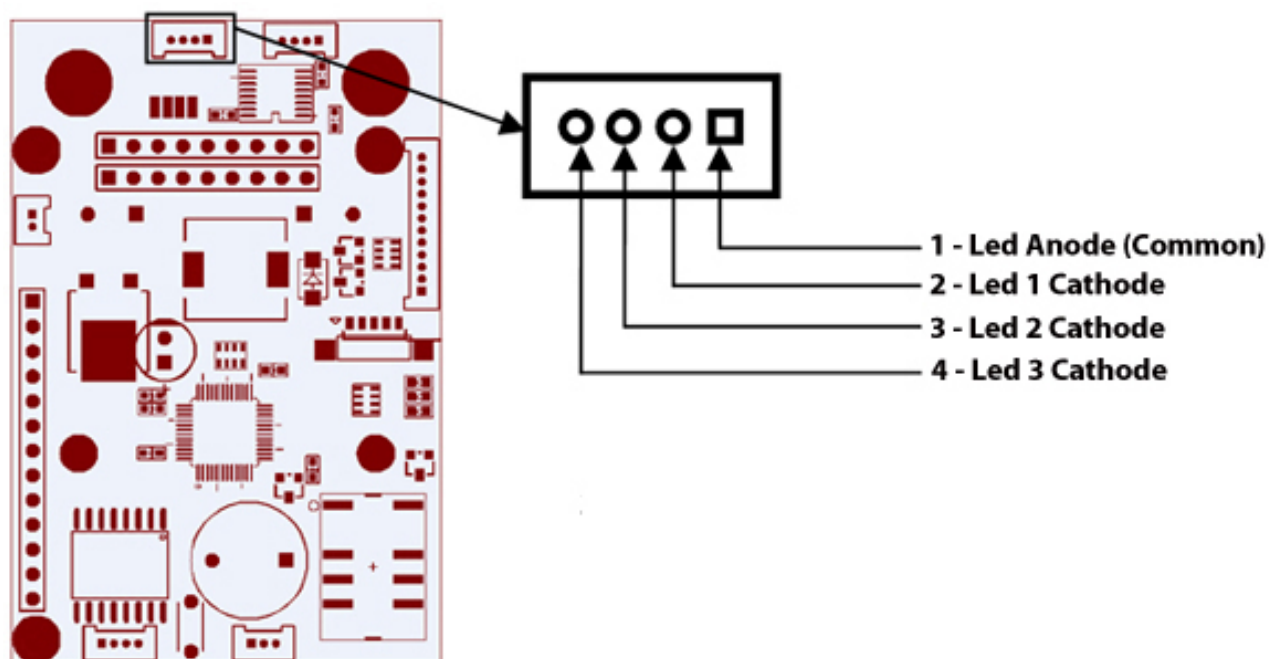
Pin	Function	Description	Sensor Type
1	IN	Sensor 1 IN (Input)	Dry Contact
2	GND	Sensor 1 GND (Ground)	
3	IN	Sensor 2 IN (Input)	Pulse Sensor
4	GND	Sensor 2 GND (Ground)	

3.2.5: J5 - Serial Communication Connector



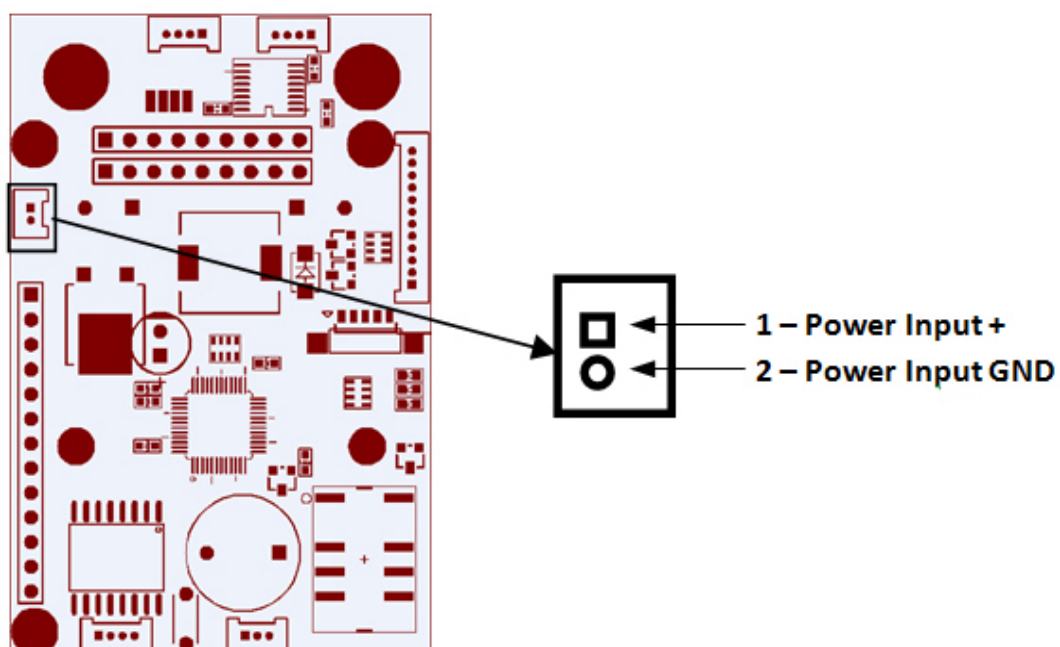
Pin	Function	Description	Jumpers
1	Tx ¹ D	Serial Port 1 Transmit data (RS-232 Levels)	J7 closed
2	Rx ¹ D	Serial Port 1 Receive data from (RS-232 Levels)	
3	GND	Ground	
4	Tx ¹ TTL	Serial Port 1 Transmit data (TTL Levels)	J7 open
5	Rx ¹ TTL	Serial Port 1 Receive data (TTL Levels)	
6	Tx ² TTL	Transmits data to TTL Level Serial Port	J8 open
7	Rx ² TTL	Transmits data from TTL Level Serial Port	
8	GND	Ground	
9	Tx ² D	Transmits data to Serial RS 232 Port	J8 closed
10	Rx ² D	Receives data from Serial RS 232 Port	
11	A	RS-485 Serial Port	
12	B	RS-485 Serial Port	

3.2.6: J10 - LEDs Connector



Pin	Function	Description
1	K	Led 5V Anode (Common)
2	A	Led 1 Cathode (Red)
3	A	Led 2 Cathode (Green)
4	A	Led 3 Cathode (Blue)

3.2.7: CN7 - Power Supply Connector



Pin	Function	Description
1	Power Input +	Positive (10~24 VDC)
2	Power Input GND	Power Ground

Suggestion: Use 12V 500mA power supply for BCGMG. Increase amperage if the same power supply is used to control door locks.

4 - BMC Board/Module GIO Connection

To connect the BMC board to a GIO Module, execute the steps below:

- 1 - Close the J8 Jumper with solder;
- 2 - Connect to serial port 2 RS-232:
 - RX wire of the GIO Module to the pin 9 (TX) of the BMC Board;
 - TX wire of the GIO Module to the pin 10 (RX) of the BMC Board;
- 3 - Using the NKHM software, open the “Settings” tab;
- 4 - Type the following parameter:

GIO=1

This configuration will activate the module.

NOTE: To use the GIO Module, the CardS2 configuration must be disabled.

5 - BMC Board/Card Reader Connection

To connect the BMC board to a card reader, please execute the steps below:

WARNING: TTL and RS-232 level can not be used simultaneously in the same port.

- 1 - Close the jumper J7 for serial 1 or J8 for serial 2 to enable RS-232 pins. Leave it open for TTL Level.
- 2 - Connect:

Serial 1 RS-232 Level

- RX wire from the first reader to the pin 1 of the BMC Board;
- TX wire from the first reader to the pin 2 of the BMC Board;

Serial 2 RS-232 Level

- RX wire from the second reader to the pin 9 of the BMC Board;
- TX wire from the second reader to the pin 10 of the BMC Board;

Serial 1 TTL Level

- RX wire from the first reader to the pin 4 of the BMC Board;
- TX wire from the first reader to the pin 5 of the BMC Board;

Serial 2 TTL Level

- RX wire from the second reader to the pin 6 of the BMC Board;
- TX wire from the second reader to the pin 7 of the BMC Board.

- 3 - Using the NKHM software, open the “Settings” tab;

4 - Type the following parameters:

CardS1=X

CardS2=X

-> (where "X" is the value which should match the connected card reader code)

0-None

1-Mifare SRT Neokoros

2-RFID 125 Khz (any with protocol like Acura's)

3-Bar Code + Code Reader

8-Mifare Duali DE-ABM6 ASCII

9-Acu Mifare AM-11

NOTE: To use a second card reader, the GIO configuration must be disabled.

6 - BMC Board/CLP Dexter μ DX200/201 RS 485 Connection (Home Automation)

To connect a BMC board with a μ DX200/201, follow the steps below:

1 - Connect the CLP A pin to the pin 11 in the BMC Board;

2 - Connect the CLP B pin to the pin 12 in the BMC Board;

3 - Connect the CLP GND wire to the GND wire in the BMC Board;

4 - Using the NKHM software, open the "Settings" tab;

5 - Type the following parameters:

uDX.Clp0Enabled=(0=disabled, 1=enabled)

-> enables or disables the communication with CLP

uDX.Clp0Addr=(0, 1, 2, 3, ...)

-> correspondent value to the DNXET address in the CLP

uDX.Clp0ComType=(0=tcp/ip, 1=rs-232, 2=rs-485)

-> communication type (network, serial 232 or serial 485)

uDX.Clp0TcpMode=(0=client, 1=server)

-> tcp/ip mode (client or server)

uDX.Clp0Var=(1, 2, 3, ...)

-> number of variable to be accessed in CLP

uDX.Clp0BaudRate=(110, 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600)

-> communication speed with the CLP

uDX.Clp0DataBits=(5, 6, 7, 8)

-> data bit communication with the CLP

uDX.Clp0StopBits=(0, 1)

-> stop bits to communication with the CLP

uDX.Clp0Parity=(0=par, 1=impar, 2=nenhum)

-> parity for communication with the CLP

uDX.Clp0FlowCtrl= (0=rts/cts , 1=xon/xoff, 2=nenhum)

-> flow control for communication with the CLP

uDX.Clp0MyAddr=(0, 1, 2, 3, ...)

-> corresponding value to the DXNET data collector address

uDX.Clp0Ip=(192.168.0.1, xxx.xxx.xxx.xxx, ...)

-> CLP network ip address

uDX.Clp0Port=(1000, 1001, 5000, ...)

-> CLP network port

7 - Disabling/Enabling Beeps

The BMC Board buzzer can be disabled/enabled by the NKHM settings. Proceed as described below:

1 - Using the NKHM software, open the “Settings” tab;

2 - Type the following parameters:

BuzzerOff=1

-> (disables beeping).

BuzzerOff=0

-> (enables beeping).

NOTE: *When the parameter is missing, the device will remain with the buzzer on.*

8 - Configuration Parameters/Values

The following sections describe other several configurable parameters used to operate the BCGMG. The parameters values can be changed using the NKHM software “Settings” tab.

8.1 - AutoGrab

When a camera is connected to BCGMG it sends a video image when a fingerprint is captured:

AutoGrab=0

-> (default, disabled).

AutoGrab=1

-> (enabled).

NOTE: *Camera hardware must generate compressed JPG image data.*

8.2 - HBInterval

Sets the time between “heartbeats” responses after which the equipment goes StandAlone if mode=2;

(Please refer to topic 8.7). Use the syntax:

HBInterval=X

-> (where "X" must a value for time in hundredths of seconds. Default = 100).

Value also can be set using hexadecimal notation. Example for 100 (default value): HBInterval=0x0064.

8.3 - HBThreshold

Sets the time limit for "heartbeats" responses, after which the equipment goes off-line. Use the syntax:

HBThreshold=X

-> (where "X" must a value for time in hundredths of seconds. Default = 500).

Value also can be set using hexadecimal notation. Example for 500 (default value): HBThreshold=0x01f4

8.4 - IgnoreSchedule

BCGMG has no real-time clock. When BCGMG is activated the internal clock will show a incorrect date. For this reason there is the parameter to ignore the timetable. The access is granted in full time (24h) to who is allowed in the data collector device.

IgnoreSchedule=0

-> (Ignore schedule is off - default).

IgnoreSchedule=1

-> (Ignore schedule is on).

8.5 - MasterPwd

Sets a master password to access the menu using the keyboard.

MasterPwd=XXXXXXXXXXXXXXXXX

-> (where "X" is a value of 1 up to 15 characters).

8.6 - MIWA

This parameter is used to enable or disable a MIWA Lock. Requires GIO110 module for utilization.

The setting will only take effect if the option GIO=1.

Please refer to section 4 - "BMC Board/Module GIO Connection".

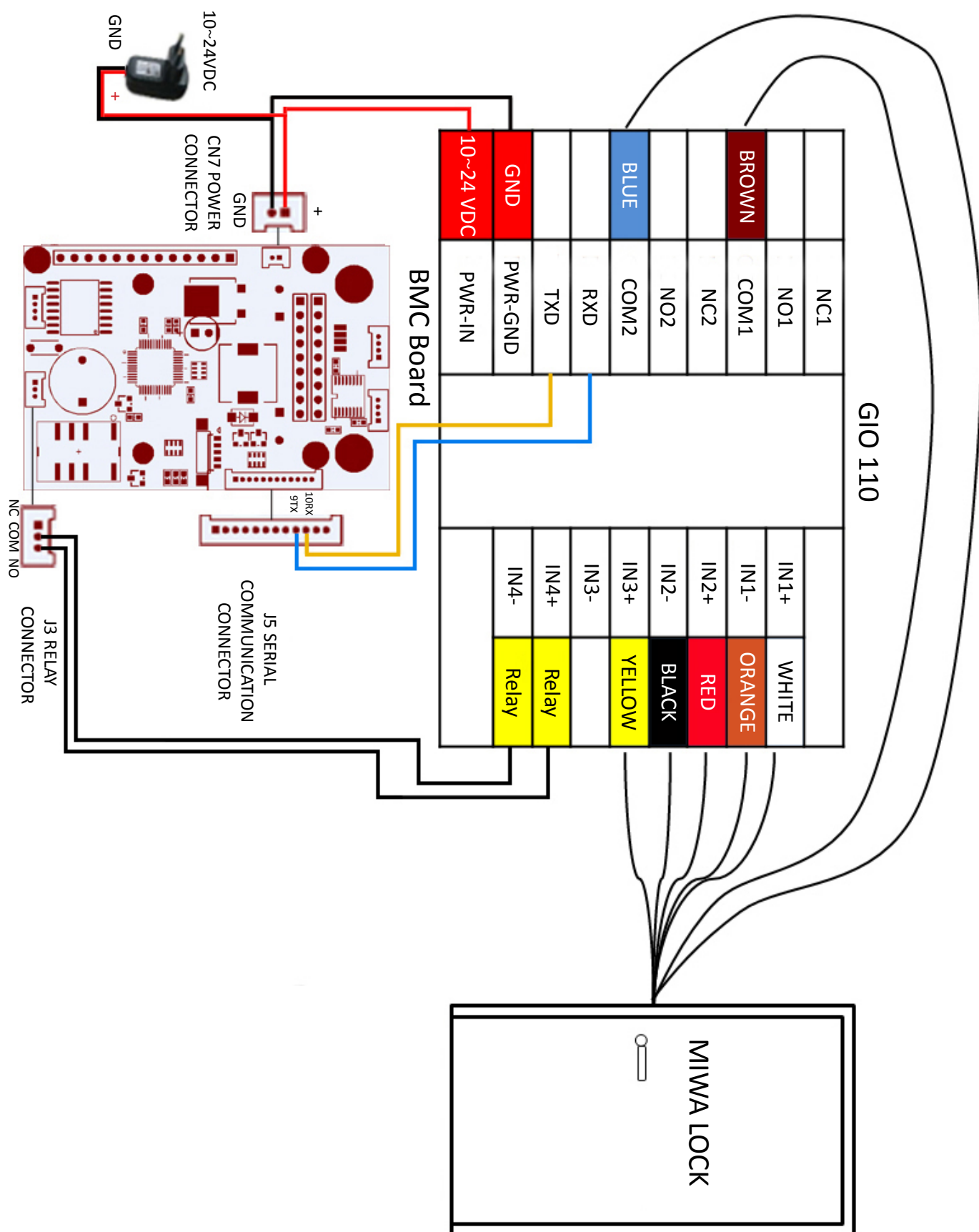
Miwa=0 (default)

-> disables Miwa mode.

Miwa=1

-> enable Miwa mode .

The following picture, describes MIWA connections to GIO110 and the BMC Board:



NOTE: GIO/BCGMG Ground must be the same if the power sources are different.

8.7 - Mode

Sets the equipment operation mode.

Mode=0:

-> StandAlone only: The equipment will operate in standalone mode, using an internal database stored in its memory.

Mode=1:

-> On line only. The device will work connected directly to a computer and send fingerprint images/templates or keyboard/card events to that computer.

Mode=2:

-> Fallback (default): The device will work connected to a computer, but if the computer stops responding, it will work in standalone mode.

8.8 - Module

The “module” parameter allows to enable or disable the biometric device reading. Use it to activate or deactivate the fingerprint reader.

Module=1

-> (enables biometric reading - default).

Module=0

-> (disables biometric reading).

8.9 - MonitorUp / MonitorDown

These parameters are used to monitor the sensor state. Any change of the state is registered and sent to the server. For on line use only.

MonitorUp=X

-> where “X” is a value correspondent to a sensor

MonitorDown=X

-> where “X” is a value correspondent to a sensor

X is an integer value that is interpreted in a range of 8 bits. Each bit of the value on or off corresponds to monitoring the corresponding sensor.

Sensors 0 and 1 are internal BCGMG sensors. Sensors 2, 3, 4 and 5 are GIO ones.

In binary, each sensor means one bit and the zero sensor is the less significant.

Example:

To monitor sensors 5 and 0, the “X” value is 33 that is equivalent to the 100001 binary value.

8.10 - PortCmd

Change the default command port. Default: 5546 UDP. This parameter is very useful when several equipments are installed in a web based application and they must be routed thru the network.

PortCmd=X

-> where "X" is a value correspondent to a port

8.11 - PortImg

UDP port for digital fingerprint images transmission. Default port is 5548

PortImg=X

-> where "X" is a value correspondent to a port

8.12 - PushButton

When a value is applied, the correspondent sensor is monitored and treats it like a pushbutton to activate the relay (for example, to opening doors and gates). Syntax for the parameter is:

Pushbutton=X

->(where "X" must a value for the desired sensor):

-1 (default - no monitoring)

0-internal sensor

1-internal sensor

2-GIO input (GIO connection required)

3-GIO input (GIO connection required)

4-GIO input (GIO connection required)

5-GIO input (GIO connection required)

NOTE: For the option PushButton work, the equipment must be operating in StandAlone mode.

8.13 - RedLedTime

Sets the duration time for the red led stay lit; (default = 500 centiseconds)

RedledTime=150

-> a second and a half

8.14 - Relay

Specifies which relay will be activated when operating in StandAlone mode. Use the syntax:

Relay=X

-> (where "X" is the value which corresponds to the desired relay)

- 0-No Relay is activated
- 5-Internal BCGMG Relay is activated
- 6-GIO Relay1 is activated - GIO connection required
- 7-GIO Relay2 is activated - GIO connection required

8.15 - RelayNr

Specifies which relay must be activated when there is no recognition:

RelayNr=X

-> (where "X" is the value which corresponds to the desired relay)

- 0-No activation
- 5-Internal BCGMG Relay is activated
- 6-GIO Relay1 is activated - GIO connection required
- 7-GIO Relay 2 is activated - GIO connection required

8.16 - RelayTime

Sets the relay activation time in case of recognition using the syntax:

RelayTime = value

-> (where "value" must be a number between 0 to 12000 hundredths of seconds. Default: 500 = 5 seconds).

External relay activation requires GIO connection.

WARNING: *Very high values used for the relay operation can be harmful for some kinds of devices, mainly electric door locks.*

8.17 - RelayTimeNr

Sets the relay activation time in case of no recognition using the syntax:

RelayTimeNr = value

-> (where "value" must be a number between 0 to 12000 hundredths of seconds. Default: 500 = 5 seconds).

8.18 - SendEvents (ReSubmitRecMa)

StandAlone operation mode records are automatically sent to server when the connection is reestablished.

SendEvents=0

-> records are not sent (default)

SendEvents = 1

-> send records

Example of recorded events sent when the parameter is set to 1 value:

TE_FreeAccess = 7 (reserved)

TE_TurnTimeout = 8 (reserved)

TE_WaitTurn = 9 (event recorded when the person is identified and waiting turnstile's spin

TE_DoorAlarm = 10 (recorded when a door alarm is activated)

8.19 - SendImage

Enables sending a fingerprint image for each fingerprint captured in online mode:

SendImage = 0

-> disables sending images

SendImage = 1 (default)

-> enables sending images

8.20 - SendTemplate

Enables sending a fingerprint template for each fingerprint captured in online mode:

SendTemplate=0

-> disables sending templates

SendTemplate=1

-> enables sending templates (default)

End User Limited Warranty Certificate

NEOKOROS IT uses the latest technology in the production of all the components used for the assembly and operation of their equipment, ensuring its products against manufacturing defects. This warranty covers defects in workmanship for a one (1) year period to the end customer since the installation of the related product and any related component is performed by authorized NEOKOROS IT personnel. This Warranty Certificate will be valid when presented with the invoice and the product/equipment serial number. In case of any defect – properly diagnosed and confirmed by the NEOKOROS Authorized Customer Support Service – replacement of any parts, components and/or accessories required for the perfect equipment function performance will be provided without any cost to the end customer.

WARRANTY CANCELLATION

This Warranty Certificate will be canceled if the defect is consequent of the following situations:

- Operation in violation of the specified conditions described in the product instruction manuals or in violation of any specified condition explained by the NEOKOROS technical staff;
- Misuse, accident, fall or use of the product in conjunction with any other equipment not previously approved, recognized and/or authorized by NEOKOROS IT;
- Inadequate transport and storage of the product and its components, including its assembling units and accessories, unauthorized modification, execution of procedures which denote any reverse engineering attempt, maintenance services performed by unauthorized personnel;
- Lightning, power surges, fluctuations in the power grid, damages caused by bad weather conditions, flooding or any other natural phenomena;
- Violation/removal of the product/equipment Warranty Seal.

HANDLING AND SHIPPING

Expenses due displacement of technicians, transportation of parts, components, handling and insurance covering are the responsibility of the end customer.

Product/Model Description:

Product Serial Number:



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